



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/649,484	08/27/2003	Stephan Ernst Bohner	93284-1	5865

24024 7590 12/15/2004

CALFEE HALTER & GRISWOLD, LLP  
800 SUPERIOR AVENUE  
SUITE 1400  
CLEVELAND, OH 44114

EXAMINER

PICKARD, ALISON K

ART UNIT PAPER NUMBER

3676

DATE MAILED: 12/15/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/649,484

Applicant(s)

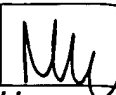
BOHNER, STEPHAN ERNST

Examiner

Alison K. Pickard

Art Unit

3676



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-49 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10, 12-45, 48 and 49 is/are rejected.
- 7) ☒ Claim(s) 11, 46 and 47 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____.  |

## DETAILED ACTION

### *Claim Objections*

1. Claims 30 and 47 are objected to because of the following informalities: claim 30, "said outer housing" and "said inner cylinder" lack antecedent basis. And, it is unclear if claim 47 should depend from claim 46. Appropriate correction is required.

### *Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-3, 12-17, 19, 20, 22-34, 39, 40, 43-45, 48, and 49 are rejected under 35 U.S.C. 102(b) as being anticipated by Porel (5,395,125).

Porel discloses a rotary swivel including a first part and second part each having a surface and separated by a gap. A rotary seal assembly at the interface comprises a seal member having an elongated annular body 9 in a groove 11 in the first part 2. The body has plural protuberances 12/13 that fit with a corresponding depression 13/12 in the surface of the groove of the first part 2 to prevent rotation (see col. 3, lines 60-64). Items 15 and 16 can also be considered a protuberance and depression. An energizing o-ring 8 is placed in the groove and on a receiving surface of the body. A method is disclosed including forming the groove, forming the depression and protuberance, and fitting the seal member and o-ring. Regarding claims 14 and 24-30, the seal member is capable of being used in these environments.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 4-10, 18, 21, and 35-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Porel.

Porel does not disclose that the protuberances extend laterally from a side of the body. Using this location is a design choice. See *In re Japikse*, 86 USPQ 70 (CCPA 1950). Also, it is known to provide an anti-rotation feature laterally extending from the side of the body as evidenced by Figure 8 of Marshall '019. Regarding claim 21, Porel does not disclose that the o-ring is nitrile. This is considered a design choice. The selection of a known material based on its suitability for its intended use is not considered inventive. See *In re Leshin* 125 USPQ 416 (CCPA 1960). Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to make the protuberance on the side and to make the o-ring from nitrile as matters of choice in design.

6. Claims 1-3, 12-14, 16, 17, 19, 20, 22-31, 33, 34, 39-42 and 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dietle (6,007,105) in view of Porel.

Dietle discloses a rotary swivel including a first part and second part each having a surface and separated by a gap and a rotary seal assembly (e.g. 30 or 41) at the interface. Dietle does not disclose a seal member with protuberances or an energizing ring. Porel teaches a sealing assembly for a swivel comprising a seal member having an elongated annular body 9 in a

Art Unit: 3676

groove 11 in the first part 2. The body has plural protuberances 12/13 that fit with a corresponding depression 13/12 in the surface of the groove of the first part 2 to prevent rotation (see col. 3, lines 60-64). Items 15 and 16 can also be considered a protuberance and depression. An energizing o-ring 8 is placed in the groove and on a receiving surface of the body. A method is disclosed including forming the groove, forming the depression and protuberance, and fitting the seal member and o-ring. Porel teaches that this assembly provides improved sealing while protecting the first and second parts from engagement damage. it would have been obvious for one of ordinary skill in the art at the time the invention was made to modify the swivel of Dietle with the assembly taught by Porel to improve the sealing effect while protecting the parts from damage.

***Allowable Subject Matter***

7. Claims 11, 46, and 47 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Conclusion***

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alison K. Pickard whose telephone number is 703-305-0882.

The examiner can normally be reached on M-F (10-7:30), with alternate Friday's off.

Art Unit: 3676

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Judy Swann can be reached on 703-306-4115. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Alison K. Pickard  
Primary Examiner  
Art Unit 3676

ap